#10
WiQ....
2/12/03

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Ivan Yang et al.
Serial No. 09/169,023
Filing Date: October 8, 1998
Confirmation No. 5153

Examiner: K. K. O. Bui
Art Group: 2611
Our file no. 00100.98.1272
Docket No. 0100.01272

Title: **SYSTEM FOR NONLINEAR CORRECTION OF VIDEO SIGNALS AND METHOD THEREOF**

Box Fee Amendment
Assistant Commissioner for Patents
U.S. Patent and Trademark Office
Washington, D.C. 20231

Attn: Examiner Krista K. O. Bui

Certificate of First Class Mailing
I hereby certify that this paper is being deposited with the
United States Postal Service as 1ST CLASS mail in an
envelope addressed to: Box Fee Amendment, Assistant
Comm. for Patents, U.S. Patent & Trademark Office,
Washington, D.C.20231, on this date.

02/03/03
Date

Karenina Oliver

Dear Sir:

In response to the Office Action mailed October 1, 2002, Applicants submit the following amendment and response along with the requisite fee and petition for a one month extension fee.

Applicants respectfully traverse and request reconsideration.

Claims 1, 4-7, 10-13 and 17-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,115,057 ("Kwoh et al.") in view of U.S. Patent No. 5,710,815 ("Ming"). Applicants respectfully traverse this present rejection.

Applicants respectfully re-submit that Kwoh is directed to, *inter alia,* a device for blocking the playing of a program video segment by replacing the blocked video segment with embedded text in the incoming stream, wherein the text describes the blocked scene if it is determined that the extracted rating data indicates that the program video segment has an unacceptable rating level. As cited by the Examiner in Kwoh, Col. 9, ll. 5-15, the text information is embedded with the incoming video signal. Hence Kwoh discloses a device for substituting the display of the extracted text data representative of the content of the program

video segment for the blocked program video segment. This device maintains control of rating levels while providing a means for the viewer to comprehend basic plot events of the censored program during the entire length of the program. The method disclosed by Kwoh requires a video signal that includes both video and corresponding descriptive text data. This method relies on a substitution of text data for blocked video data, and therefore does not require scrambling of video data. In fact, due to the embedded nature of video and text data, scrambling would result in a loss of text data and therefore render useless the substitution of text for video data in Kwoh's method. Applicants' respectfully submit that the Kwoh reference teaches away from any method of scrambling as a way to prevent viewing of video or programs.

With respect to Claim 1, steps a) and b), the Kwoh reference has been cited, inter alia, in Col. 3, line 53, to Col. 4, line 16, to show a method to either enable selected programs for viewing, or to block selected programs. Applicants claim, inter alia, a method and apparatus for controlling display of content signals and claim a method of scrambling at least a portion of the at least one of video, audio, and text content to produce scrambled content, and providing the scrambled content to a content rendering device when the at least one associated content control indicator compares unfavorably to the at least one content control setting. Kwoh teaches away from a method of scrambling video, audio, or text content as noted above. Accordingly, Claim 1 is believed to be allowable in view of Kwoh.

Ming is directed to, *inter alia*, an encoder and decoder for television signals with embedded viewer access control data. More specifically, Ming discloses, *inter alia*, a television broadcast system having a plurality of channel processors 102 that include channel controllers 105 for controlling scrambling of associated video television programs. Video frames of the signal 110 are scrambled by signal encoder 103 under the control of the corresponding channel controller using a random line inversion and synchronization suppression technique. In other words, Ming teaches a system, *inter alia*, in which when a particular signal is not to be viewed, for example, when it is a pay-per-view program and the user has not paid the proper subscription fee or it is a cable subscription and the user has not subscribed to a particular channel, the data formatter and video scrambler control 118 generates a scrambled output signal which is provided to an output device.

Combining the teachings of Kwoh and Ming renders Kwoh's invention inoperative. Kwoh discloses a device for blocking rated video segment data that is below the desired rating level entered by the user. Kwoh further discloses a device for substituting the display of the extracted text data representative of the content of the program video segment for the blocked program video segment. Ming provides a system for encoding a scrambled broadcast television signal when a decoded flag does not correspond with an internal register value. Ming scrambles the output signal to be unintelligible. Because Ming's device scrambles text data along with video data, combining this device with Kwoh's method of substituting text data in place of video segment data would render Kwoh's device inoperative. Therefore the combination of references is improper, thereupon the claims are allowable in view thereof.

As previously asserted with regards to Claim 4, the Office action cites Col. 12, line 63 to Col. 13, line 5; Col. 14, ll. 7-30; and Col. 14, line 66 to Col. 15, line 45 of Kwoh as disclosing a method of scrambling the text content and providing the scrambled closed captioned content to a display. Applicants are unable to find any teaching of signal scrambling in the cited portion of the Kwoh reference. Applicants also respectfully submit that the Examiner admits that Kwoh does not show the steps of "c) scrambling at least a portion of the at least one of video, audio, and text content to produce scrambled content, and d) providing the scrambled content to a content rendering device." In view of Claim 1 above, the Kwoh reference does not teach any method of scrambling text data. Accordingly, Claim 4 is also believed to be allowable in view of the Kwoh reference. Should the Examiner maintain the present rejection, Applicants respectfully request a showing of explicitly where these limitations are disclosed as Applicants maintain traverse of the Examiner's previously noted citations, which as discussed above, fail to teach or suggest the claimed limitations.

With respect to Claim 5, the Kwoh reference has been cited, inter alia, in Col 1, line 65 to Col 2, line 2 that "the parent can specify a PG (parental guidance) rating as a desired rating level. Then any program video segments with a rating of PG-13, R, or X will be blocked from viewing; however, PG and G program video segments will be displayed." The Office Action includes the Examiner's explanation that copy restriction abilities are provided for by Kwoh by "disabling or blocking a program as unfavorable program is set to be restricted; or in other words, the viewer is prevented from copying the content signal". In fact, the device disclosed by Kwoh would not

prevent copying because the viewer is not denied access to the content signal. For example, Kwoh discloses a device for substituting the display of the extracted text data representative of the content of the program video segment for the blocked program video segment. Therefore there is always either video or text data signals displayed on a video display device, but Kwoh does not disclose a method to prevent the copying of these signals. Accordingly Claim 5 is also believed to be allowable in view of the Kwoh reference.

With respect to claim 6, the Office Action cites Kwoh as disclosing, inter alia, "an audio scrambling signal to an audio processing module". Applicants respectfully reassert the above position offered with respect to Claim 1, specifically the fact that the Kwoh and Ming references are not properly combinable. Accordingly Claim 6 is believed to be allowable in view thereof.

As to Claim 7, Applicants respectfully reassert the above position with respect to Claim 1, specifically the fact that the Kwoh and Ming references are not properly combinable. Accordingly Claim 7 is believed to be allowable in view thereof.

With respect to Claims 10-12, the Office Action rejects these claims for the reasons given in the scope of Claims 4-6. Applicants respectfully reassert the relevant remarks with respect to Claims 4-6, specifically that the Kwoh reference does not teach any method of scrambling text data, and the device disclosed by Kwoh would not prevent copying because the viewer is not denied access to the content signal. Accordingly Claims 10-12 are believed to be allowable in view of the Kwoh reference.

Regarding independent Claim 13, the Office Action rejects these claims for the reasons given in the scope of Claim 7. Applicants again respectfully reassert the above position with respect to Claims 1 and 7, specifically the fact that the Kwoh and Ming references are not properly combinable. Accordingly Claim 13 is believed to be allowable in view thereof.

With respect to Claims 17-19, the Office Action rejects these claims for the reasons given in the scope of Claims 4-6. Applicants respectfully reassert the relevant remarks with respect to Claims 4-6, specifically that the Kwoh reference does not teach any method of scrambling text data, and the device disclosed by Kwoh would not prevent copying because the viewer is not

denied access to the content signal. Accordingly Claims 17-19 are believed to be allowable in view of the Kwoh and Ming references.

Regarding Claim 20, the Office Action cites Kwoh as disclosing "at least one of a display and a recorder, wherein the display and the recorder are operably coupled to receive the video output". Applicants respectfully reassert the relevant remarks with respect to Claim 13, and also the fact that Claim 20 adds novel subject matter to the invention. Claim 20 is believed to be allowable in view of the Kwoh and Ming references.

Claims 2-3, 8-9, 14-16 and 21-22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kwoh in view of Ming and U.S. Patent No. 4,605,961 ("Frederiksen"). Applicants respectfully traverse the present rejection.

Applicants re-submit Frederiksen is directed to a subscriber cable television system with an improved time-warp and segment scrambling method for providing extremely high security. Frederiksen teaches a technique for a secure communications system, such as a cable television system wherein designated subscribers are enabled to receive particular program material and are able to descramble subscriber television signals.

With respect to Claims 2, 8 and 14, the Office Action rejects these claims for the reasons that it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kwoh and Ming with Frederiksen's method of using a separate audio scrambler in scrambling at least a portion of the audio content. Applicants respectfully reassert the relevant remarks made above with respect to Kwoh and Ming. Therefore, the combination with Frederiksen is also improper. In any event Claims 2, 8 and 14 are believed to be allowable in view of the Kwoh, Ming, and Frederiksen references.

With respect to Claims 3, 9 and 15, the Office Action cites Frederiksen as disclosing a method of, inter alia, "attenuating the at least a portion of the audio content to produce the scrambled audio content". In view of Claim 1 above, the Kwoh reference does not teach any method of scrambling, and in fact teaches away from this practice. In any event, the scrambling of Frederiksen uses random number-based scrambling, while the Applicants claim a method of

scrambling that utilizes attenuation of the input video signal. Accordingly Claims 3, 9 and 15 are believed to be allowable in view of the Kwoh and Frederiksen references.
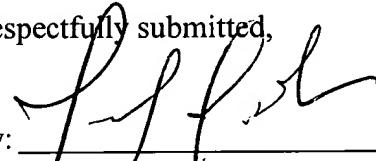
As to Claim 16, Applicants respectfully reassert the relevant remarks with respect to Claim 15. In any event, the scrambling of Frederiksen uses random number-based scrambling, while the Applicants claim a method of scrambling that utilizes attenuation of the input video signal. Accordingly Claim 16 is believed to be allowable in view of the Frederiksen reference.

As to Claims 21 and 22, Applicants respectfully reassert the relevant remarks with respect to Claims 1, 4-6, and 2-3, specifically the fact that the Kwoh, Ming, and Frederiksen references are not properly combinable. Accordingly Claims 21 and 22 are believed to be allowable in view of the Kwoh, Cragun, and Frederiksen references.

Applicants respectfully submit that the claims are in condition for allowance and respectfully request that a timely Notice of Allowance be issued in this case. The Examiner is invited to contact the below-listed attorney if the Examiner believes that a telephone conference will advance the prosecution of this application.

Date: February 3, 2003

Respectfully submitted,

By: _____
Timothy J. Bechen
Registration No. 48,126

VEDDER, PRICE, KAUFMAN & KAMMHOLZ
222 N. LaSalle Street
Chicago, IL 60601
(312) 609-7599
Facsimile: (312) 609-5005